Lu-177 Eligibility Quick Reference

Appalachian Radiotheranostics Coalition | arctheranostics.org | For referring providers

PLUVICTO | LUTATHERA

PLUVICTO 177Lu-PSMA-617 — FDA approved 2022 · VISION / PSMAfore

INDICATION: Metastatic castration-resistant prostate cancer (mCRPC)

Metastatic CRPC	Confirmed mets + progression on ADT
Prior ARPI	Enzalutamide, apalutamide, etc. with progression
Prior taxane	Docetaxel or cabazitaxel; OR taxane-ineligible; OR taxane deferred
PSMA-PET/CT	Any approved PSMA-PET/CT agent with ≥1 PSMA positive lesion
PSMA-negative	VISION excluded; discuss mixed disease with theranostics team
Organ function	CrCl ≥30 mL/min · ANC ≥1,500 · Plt ≥100k · Hgb ≥8 · Bili ≤1.5×ULN
ECOG PS	0–2 required; ECOG 3–4 requires individualized discussion

COMMON MISCONCEPTIONS

"Already had chemo — done enough"
Post-taxane is a common starting point. Most patients tolerate therapy well.

"PSA too high / disease too advanced"
PSA has no cutoff. Organ function and PS matter. High PSA (>500) routinely treated.

"Already on next agent — too late"
Sequencing is a team decision. If criteria are met, refer and let the theranostics team advise.

RELATIVE CAUTIONS (flags, not hard stops)

- Xerostomia / salivary gland disease: PSMA-expressed; dry mouth is most common issue
- Prior extensive pelvic/spine radiation: affects marrow reserve; influences dosimetry
- Active second malignancy — assess case-by-case; prostate response may enable targeted second cancer treatment
- Renal impairment — CrCl <30 mL/min: hard stop · CrCl 30–50: close monitoring, not exclusionary

Uncertain? Refer. A borderline consult beats a missed eligible patient every time.

LUTATHERA 177Lu-DOTATATE — FDA approved 2018 · NETTER-1/-2

INDICATION: SSTR-positive gastroenteropancreatic NETs (GEP-NETs)

SSTR-positive	DOTATE PET/CT or Octreoscan - confirmed SSTR expression
GEP-NET	Midgut, hindgut, foregut, pancreatic, or other GI origin NET
Grade 1-3 well-differentiated	Grade 1–2 (Ki-67 <20%) established; NETTER-2 extended to grade 2–3 (Ki-67 ≤55%) Poorly differentiated NEC (Ki-67 >55%): generally not candidates
Inoperable or metastatic	Locally unresectable or metastatic; evaluate surgical options first for resectable disease
Prior SSA or indication	NETTER-1: progression on octreotide LAR or lanreotide NETTER-2: SSA-naive with high-grade/high-burden may qualify
Organ function	CrCl ≥40 mL/min · ANC ≥1,500 · Plt ≥100k · Hgb ≥8 PT-INR required · Extensive hepatic replacement: flag, not a halt
ECOG PS	0–2 required; poor PS requires individualized assessment

COMMON MISCONCEPTIONS

"Stable on octreotide — why change?"
Stable ≠ optimal. NETTER-2 supports earlier PRRT for advanced disease. PRRT + SSA often outperforms SSA alone.

"Disease too indolent — watch and wait"
Grade 2–3, high burden, or significant carcinoid symptoms: referral conversation should happen now.

"GEP-NET vs lung NET — does it matter?"
Technically yes (NETTER-1 was GEP-NET). Bronchopulmonary NETs treated off-label with growing evidence: discuss with theranostics team rather than exclude.

"Already had PRRT — not eligible again"
Re-treatment is routine for patients who tolerated therapy well and meet inclusion criteria on progression.

IMAGING NOTE

If SSTR imaging was an Octreoscan >2 yrs ago, consider upgrading to DOTATATE PET/CT. Significantly better sensitivity and resolution. Strong uptake across all sites = favorable PRRT picture. Heterogeneous uptake: discuss with theranostics team: not automatically exclusionary.

Diagnostic scan = eligibility test. SSTR uptake confirms the therapy has a target.

AT A GLANCE COMPARISON

	Pluvicto (177Lu-PSMA-617)	Lutathera (177Lu-DOTATATE)
Indication	mCRPC	GEP-NETs (SSTR+)
Key diagnostic	PSMA-PET/CT (68Ga or 18F)	68Ga-DOTATATE PET/CT or Octreoscan
Prior therapy	ARPI + taxane (or taxane-ineligible/deferred)	Progression on SSA; earlier use per NETTER-2
Renal threshold	CrCl ≥30 mL/min	CrCl ≥40 mL/min
Performance status	ECOG 0–2	ECOG 0–2
Grade restriction	N/A	Well-differentiated grades 1–3 (Ki-67 <55%)
Key trials	VISION / PSMAfore	NETTER-1 / NETTER-2

REFERRAL CHECKLIST — include with every consultation

- ☐ Diagnosis, staging, current disease status
- ☐ Full treatment history (agents, dates, reason stopped)
- ☐ PSMA-PET or SSTR imaging (DICOM preferred; report acceptable)
- ☐ CBC, CMP, CrCl, testosterone (prostate) or PT-INR (NET)
- ☐ PSA trend or CgA/5-HIAA over 3–6 months
- ☐ Performance status + relevant comorbidities
- ☐ "Is this patient a candidate for Lu-177?" is sufficient to initiate consultation

 VISION (Sartor et al., NEJM 2021) · PSMAfore (Fizazi, Lancet Oncol 2023) · NETTER-1 (Strosberg, NEJM 2017)